

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Frank O'Bannon Governor

Lori F. Kaplan Commissioner

100 North Senate Avenue P. O. Box 6015 Indianapolis, Indiana 46206-6015 (317) 232-8603 (800) 451-6027 www.IN.gov/idem

Mr. William Banks Foamex, L.P. 3005 Commercial Road Fort Wayne, IN 46809

Re: 003-16194

Second Minor Permit Modification to Part 70 No.: T003-7680-00225

Dear Mr. Banks:

Foamex, L.P. was issued a permit on March 22, 1999 for a stationary polyurethane foam production and foam processing plant. A letter requesting changes to this permit was received on October 3, 2002. Pursuant to the provisions of 326 IAC 2-7-12 a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of one (1) 6-platen felt press (ID No. FPE), pressing a maximum of 35 foam sheets per hour, exhausting through one (1) stack (ID No. 51). Potential PM/PM10 and VOC emissions from this unit are at exempt levels, however, the unit is subject to the particulate emission limitations pursuant to 326 IAC 6-3 (Particulate Emission Limitations from Manufacturing Processes). The modification also consists of the removal of the 9-platen felt press, previously identified as FPE, and the thermal reticulation unit, identified as TRU-02 from the Part 70 permit since these units were not constructed.

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this modification and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Trish Earls, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call at (973) 575-2555, ext. 3219 or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original signed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments TE/EVP

cc: File - Allen County

U.S. EPA, Region V

Allen County Health Department

Air Compliance Section Inspector - Jennifer Dorn

Compliance Data Section - Karen Nowak

Administrative and Development

Technical Support and Modeling - Michelle Boner

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PART 70 OPERATING PERMIT OFFICE OF AIR QUALITY

Foamex, L.P. 3005 Commercial Road Fort Wayne, Indiana 46809

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 and 326 IAC 2-1-3.2 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T003-7680-00225		
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date:	March 22, 1999

First Administrative Amendment No.: 003-12211-00225, issued May 10, 2000 First Minor Source Modification No.: 003-12178-00225, issued on May 10, 2000; Second Minor Source Modification No.: 003-13852-00225, issued March 15, 2001; First Minor Permit Modification No.: 003-13909-00225, issued April 30, 2001;

First Significant Source Modification No.: 003-12873-00225, issued on July 3, 2001; and Second Administrative Amendment No.: 003-14443-00225, issued August 15, 2001.

Second Minor Permit Modification No.: 003-16194-00225	Pages Affected: 4, 4a, 5, 6, 39a, 39b, 39c
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 29, 2003

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Fort Wayne, Indiana OP No. T003-7680-00225

Permit Reviewer: TE/EVP

D.4 FACILITY OPERATION CONDITIONS - Two (2) 12.6 MMBtu per hour Boilers

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.4.1 Particulate Matter Limitation (PM) [326 IAC 6-2-3]
- D.4.2 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1]
- D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements

- D.4.4 Testing Requirements [326 IAC 2-7-6(1),(6)]
- D.4.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.4.6 Visible Emissions Notations

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.7 Record Keeping Requirements

D.5 FACILITY OPERATION CONDITIONS - Two (2) Storage Tanks

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.5.1 Volatile Organic Compounds (VOC) [326 IAC 12] [40 CFR 60.110b, Subpart Kb]

Compliance Determination Requirements

D.5.2 Testing Requirements [326 IAC 2-7-6(1),(6)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.3 Record Keeping Requirements

D.6 FACILITY OPERATION CONDITIONS - Two (2) Felt Presses

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.6.1 Volatile Organic Compounds (VOC) [326 IAC 2-1]
- D.6.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Compliance Determination Requirements

D.6.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.4 Record Keeping Requirements

D.7 FACILITY OPERATION CONDITIONS - One (1) Flame Laminator

Emission Limitations and Standards [326 IAC 2-7-5(1)]

- D.7.1 Volatile Organic Compounds (VOCs)
- D.7.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Compliance Determination Requirements

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.4 Record Keeping Requirements

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D.8 FACILITY OPERATION CONDITIONS - One (1) Felt Press (FPE)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Volatile Organic Compounds (VOCs) and Particulate Matter Less than 10 Microns (PM-10) [326 IAC 2-1.1-3]

D.8.2 Particulate [326 IAC 6-3-2]

Certification

Emergency/Deviation Occurrence Report Natural Gas Fired Boiler Certification Quarterly Compliance Monitoring Report Foamex, L.P. Page 5 of 44
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Fort Wayne, Indiana Permit Reviewer: TE/EVP

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary polyurethane foam production and foam processing plant.

Responsible Official: Plant Manager

Source Address: 3005 Commercial Road, Fort Wayne, Indiana 46809 Mailing Address: 3005 Commercial Road, Fort Wayne, Indiana 46809

SIC Code: 3086 County Location: Allen

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

Minor Source, under PSD Rules;

Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- one (1) natural gas flame laminator machine (ID No. FL-02), with a maximum capacity of 40,000 square feet per hour, and exhausting through one (1) stack (ID No. 02-002);
- one (1) polyurethane foam manufacturing process (ID No. PLC-01), producing a maximum of nine (9) million board feet per day of polyurethane foam, consisting of:
 - (a) two (2) mix chambers;
 - (b) one (1) periphlex pour line, exhausting through ten (10) stacks (ID Nos. 1-5, 9-12, and 19):
 - (c) one (1) ester pour line, exhausting through six (6) stacks (ID Nos. 21-26);
 - (d) three (3) foam bun storage areas (Carpet Underlay Mezzanine Bun Grabber Area, South Finishing Mezzanine Bun Grabber Area, and the Loaf Stacker Area), exhausting through fourteen (14) stacks (ID Nos. 13-15, 17, 18, 20, 27-33, and 49);
- one (1) thermal reticulation unit (ID No. TRU-01), processing a maximum of 10 cycles of polyurethane foam buns per hour, at a maximum volume of 244,296 cubic inches of foam per cycle, exhausting through ten (10) stacks (ID Nos. 35-44);
- (4) two (2) natural gas fired boilers (ID Nos. IPB-01 and IPB-02), each rated at 12.6 million (MM) British thermal units (Btu) per hour, using No. 2 distillate fuel oil as back-up fuel, and each exhausting through one (1) stack (ID Nos. 45 and 46);
- one (1) 4 sheet felt press (ID No. FPA), pressing a maximum of 131,400 sheets per year, exhausting through one (1) stack (ID No. 47); and
- one (1) 6 sheet felt press C (ID No. FPC), processing a maximum of 300,000 sheets per year, exhausting through one (1) stack (ID No. 48);

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one (1) 6 sheet felt press D (ID No. FPD), with a maximum foam processing rate of 300,000 sheets per year, exhausting through one (1) stack (ID No. 49);

- (8) one (1) flame laminator ID: FL-03, with natural gas-fired burner rated at 0.35 million British Thermal Units per hour (mmBtu/hr). This laminator has a maximum capacity to process foam at a rate of 3,000,000 square feet per month (ft²/mo), exhausting through stack ID: 02-003); and
- (9) one (1) six-platen felt press E (ID FPE), with a maximum capacity to process foam at a rate of 35 sheets per hour, exhausting through one (1) stack (ID No. 51).

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (1) polyol storage tanks with VOC emissions less than 3 pounds per hour or 15 pounds per day (one tank has a storage capacity of 30,000 gallons); and
- one (1) 20,000 gallon No. 2 fuel oil storage tank with VOC emissions less than 3 pounds per hour or 15 pounds per day.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22); and
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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SECTION D.7

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(8) One (1) flame laminator ID: FL-03, with natural gas-fired burner rated at 0.35 million British Thermal Units per hour (mmBtu/hr). This laminator has a maximum capacity to process foam at a rate of 3,000,000 square feet per month (ft²/mo), exhausting through stack ID: 02-003).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Volatile Organic Compounds (VOCs)

Any change or modification which may increase the potential to emit VOC, PM and PM10 greater than minor source threshold, as specified in 326 IAC 2-1, based on the stack test required in the Part 70 permit to verify the emission factors shall be subject to New Source Review and must be approved by the Office of Air Quality (OAQ) before such change can occur.

D.7.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the PM emissions from the following unit shall be limited as follows:

Facility	Process Weight Rate (ton/hr)	PM Emissions Limit (lb/hr)
Flame laminator ID: FL-03	2.0	6.5

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where : E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Compliance Determination Requirement

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required by this permit to perform compliance tests. However, the Commissioner reserves the right to invoke its authority under 326 IAC 2-1.1-11 to require stack testing, monitoring or reporting at any time to assure compliance with all applicable requirements. If testing is required by IDEM compliance with Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.4 Record Keeping Requirements

- (a) The Permitted shall maintain records in accordance with (1) through (4) below for the above facilities. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.7.1.
 - (1) The weight of the polyurethane foam processed;

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(2) The total production of laminated foam per month in square feet for the flame laminator;

- (3) A log of the dates of use; and
- (4) The weight of VOC emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

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SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(9)one (1) six-platen felt press E (ID FPE), with a maximum capacity to process foam at a rate of 35 sheets per hour, exhausting through one (1) stack (ID No. 51).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

Volatile Organic Compounds (VOCs) and Particulate Matter Less than 10 Microns (PM-10) [326 D.8.1 IAC 2-1.1-31

Any change or modification that would lead to an increase in allowable emissions greater than exempt levels, as specified in 326 IAC 2-1.1-3, based on a stack test emission factors of 0.0024 lbs VOC per sheet of foam processed at maximum capacity and 0.0007 pound of PM10 per sheet of foam processed at maximum capacity, shall obtain approval from the Office of Air Quality (OAQ) before such change can occur.

D.8.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the six-platen felt press E (ID FPE) shall not exceed 3.26 pounds per hour when operating at a process weight rate of 1420 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Permit Modification to a Part 70

Operating Permit

Source Background and Description

Source Name: Foamex, L.P.

Source Location: 3005 Commercial Road, Fort Wayne, Indiana 46809

County: Allen SIC Code: 3086

Operation Permit No.: T 003-7680-00225
Operation Permit Issuance Date: March 22, 1999
Permit Modification No.: 003-16194-00225
Permit Reviewer: Trish Earls/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Foamex, L.P. relating to the operation of a stationary polyurethane foam production and foam processing plant.

History

On October 3, 2002, Foamex, L.P. submitted an application to the OAQ requesting to add a new six-platen felt press (ID FPE) to their existing plant. Foamex, L.P. was issued a Part 70 permit on March 22, 1999. Additionally, the 9-platen felt press that was permitted under Minor Source Modification No. 003-13852-00225, issued on March 15, 2001, was referred to as Unit ID FPE. However, this felt press was not constructed so the new 6-platen felt press will now be referred to as Unit ID FPE.

The source has stated that they have no plans to construct the 9-platen felt press and have requested that it be removed from the Part 70 permit. They have also requested that the thermal reticulation unit, identified as TRU-02, that was permitted under Significant Source Modification No. 003-12873-00225, issued on July 3, 2001, be removed from the Part 70 permit since they did not construct this unit and have no plans to construct it in the future. These units will be removed from the Part 70 permit and the existing source emissions will be adjusted to reflect the removal of these units.

Additionally, the source has requested that the responsible official be changed from William Banks to Plant Manager.

New Emission Units and Pollution Control Equipment

The application includes information relating to the construction and operation of the following equipment:

one (1) six-platen felt press E (ID FPE), with a maximum capacity to process foam at a rate of 35 sheets per hour, exhausting through one (1) stack (ID No. 51)

Foamex, L.P. Fort Wayne, Indiana Permit Reviewer: TE/EVP

Existing Approvals

The source was issued a Part 70 Operating Permit (T003-7680-00225) on March 22, 1999. The source has since received the following:

- (a) First Administrative Amendment No.: 003-12211-00225, issued on May 10, 2000;
- (b) First Minor Source Modification No.: 003-12178-00225, issued on May 10, 2000;
- (c) Second Minor Source Modification No.: 003-13852-00225, issued March 15, 2001;
- (d) First Minor Permit Modification No.: 003-13909-00225, issued April 30, 2001;
- (e) First Significant Source Modification No.: 003-12873-00225, issued on July 3, 2001; and
- (f) Second Administrative Amendment No.: 003-14443-00225, issued August 15, 2001.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
51	6-platen felt press E (ID FPE)	20	2' x 3'	5,000	120

Recommendation

The staff recommends to the Commissioner that the Minor Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 3, 2002.

Emission Calculations

Six-platen felt press E (ID FPE) Emissions:

In the felt press, polyurethane foam sheets are pressed between hot metal platens. The platens are heated by a hot oil system that is heated electrically.

The PM/PM10 and VOC emission factors used to calculate emissions were obtained from a compliance stack test performed at this source from June 5 - June 7, 2002. Results from testing on an existing, identical six-platen felt press (ID FPC) were used to determine emission factors in lb/sheet of foam processed. The emission factors also include a 20% safety factor.

Facility	Throughput (sheets/hour)	VOC Emission Factor, Ef (lb/sheet)	VOC Emissions (tons/yr)	PM/PM10 Emission Factor, Ef (lb/sheet)	PM/PM10 Emissions (tons/yr)
6-Platen Felt Press E (ID FPE)	35	0.0024	0.37	0.0007	0.11

Methodology

Foamex, L.P. Fort Wayne, Indiana Permit Reviewer: TE/EVP

Potential To Emit Before Controls (Modification)

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

Pollutant	Potential To Emit (tons/year)
PM	0.11
PM-10	0.11
SO ₂	0.0
VOC	0.37
CO	0.0
NO _x	0.0

There are no HAP emissions from this modification.

Justification for Modification

The Title V permit is being modified through a Minor Permit Modification. This modification is being performed pursuant to 326 IAC 2-7-12(b), since potential emissions are at exempt levels pursuant to 326 IAC 2-1.1-3. This modification cannot be processed as an administrative amendment pursuant to 326 IAC 2-7-11 because 326 IAC 6-3 (Particulate Emission Limitations for Manufacturing Processes) is applicable to the new felt press so a new applicable requirement must be added. A Minor Source Modification pursuant to 326 IAC 2-7-10.5(d) is not required because potential emissions are below the thresholds requiring a Minor Source Modification and the modification does not meet any of the other criteria requiring a Minor Source Modification.

County Attainment Status

The source is located in Allen County.

Pollutant	Status
PM-10	attainment
SO ₂	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone.

Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Allen County has been designated as attainment or unclassifiable for ozone.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	4.43
PM-10	4.33

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SO ₂	56.0
VOC	201.76
СО	97.3
NOx	17.72

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are based upon the Part 70 Operating Permit (T003-7680-00225) issued on March 22, 1999 and all approvals issued to the source since that time. These emissions are also revised to reflect removal of units TRU-02 and the 9-platen felt press from this source and the reduction in emissions for unit FL-02 as permitted in Significant Source Modification 003-12873-00225, issued on July 3, 2001.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM PM-10 SO ₂ VOC CO NO _X HAF						HAPs
6-Platen Felt Press E (ID FPE)	0.11	0.11	0.0	0.37	0.0	0.0	0.0
Total Emissions	0.11	0.11	0.0	0.37	0.0	0.0	0.0
PSD Significant Modification Threshold	250	250	250	250	250	250	N/A

This modification to an existing minor stationary source is not major because the emissions increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2 and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this modification.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this modification.
- (c) The 6-platen felt press E (ID FPE) is not subject to 40 CFR Part 63, Subpart III, "National Emission Standards for Hazardous Air Pollutants for Flexible Polyurethane Foam Manufacturing". This rule applies to each new and existing process that produces flexible polyurethane foam or rebond foam, that emits a HAP and is located at a plant that is a major source for HAPs. Pursuant to 40 CFR 63.1290(c), a process meeting one of the following criteria listed in paragraphs (c)(1) through (3) of 40 CFR 63.1290 shall not be subject to the provisions of this subpart:

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- (1) A process exclusively dedicated to the fabrication of flexible polyurethane foam;
- (2) A research and development process; or
- (3) A slabstock flexible polyurethane foam process at a plant site where the total amount of HAP, excluding diisocyanate reactants, used for slabstock foam production and foam fabrication is less than or equal to five tons per year, provided that slabstock foam production and foam fabrication processes are the only processes at the plant site that emit HAP.

The proposed 6-platen felt press E (ID FPE) does not produce the flexible polyurethane foam, does not emit any HAPs, and is a process that is exclusively dedicated to the fabrication (i.e. cutting, or bonding flexible polyurethane foam pieces together or to other substrates) of flexible polyurethane foam. Therefore this rule does not apply to this unit.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-4.1-1 (New Source Toxics Control)

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any HAP or 25 tons per year of any combination of HAPs, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). The new 6-platen felt press E (ID FPE) does not emit HAPs, therefore, the requirements of this rule do not apply.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2, the allowable particulate emission rate from the 6-platen felt press E (ID FPE) shall not exceed 3.26 pounds per hour when operating at a process weight rate of 1,420 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour = 0.71 ton/hr

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The potential particulate emissions from the felt press are less than the allowable emissions pursuant to this rule, therefore the unit is in compliance with this limit.

326 IAC 8-1-6 (New Facilities, General Reduction Requirements)

The 6-platen felt press E (ID FPE) is not subject to this rule because potential VOC emissions are less than 25 tons per year.

There are no other applicable state rules.

Testing Requirements

The emission factors used to calculate emissions were based on a recent stack test conducted on June 5 - 7, 2002, according to the protocol submitted to IDEM, OAQ on May 24, 2002, at this source which included testing on an identical 6 sheet felt press (ID FPC), the flame laminator (FL-02) and the four sheet felt press (ID FPA). Therefore, stack testing is not required in this modification.

Compliance Requirements

Permits issued under 326 IAC 2-7are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this modification.

Changes Proposed

The changes listed below have been made to the Part 70 Operating Permit (T003-7680-00225).

1. Section A.1 is revised such that the responsible official is changed from William Banks to Plant Manager.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary polyurethane foam production and foam processing plant.

Responsible Official: William Banks Plant Manager

Source Address: 3005 Commercial Road, Fort Wayne, Indiana 46809 Mailing Address: 3005 Commercial Road, Fort Wayne, Indiana 46809

SIC Code: 3086 County Location: Allen

County Status: Attainment for all criteria pollutants

Source Status: Part 70 Permit Program

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Permit Reviewer: TE/EVP

Minor Source, under PSD Rules; Major Source, Section 112 of the Clean Air Act

- 2. Section A.2 is revised to include the new 6-platen felt press E (ID FPE) and the equipment descriptions under items (6) and (7) have been revised for clarity. The 9-platen felt press and the thermal reticulation unit (TRU-02) have been removed since they will not be constructed. Also, since the 9-platen felt press has not been constructed, the new 6-platen felt press will now be referred to as Unit ID FPE. Section A.2 is revised as follows:
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- one (1) natural gas flame laminator machine (ID No. FL-02), with a maximum capacity of 40,000 square feet per hour, and exhausting through one (1) stack (ID No. 02-002);
- (2) one (1) polyurethane foam manufacturing process (ID No. PLC-01), producing a maximum of nine (9) million board feet per day of polyurethane foam, consisting of:
 - (a) two (2) mix chambers;
 - (b) one (1) periphlex pour line, exhausting through ten (10) stacks (ID Nos. 1-5, 9-12, and 19);
 - (c) one (1) ester pour line, exhausting through six (6) stacks (ID Nos. 21-26);
 - (d) three (3) foam bun storage areas (Carpet Underlay Mezzanine Bun Grabber Area, South Finishing Mezzanine Bun Grabber Area, and the Loaf Stacker Area), exhausting through fourteen (14) stacks (ID Nos. 13-15, 17, 18, 20, 27-33, and 49);
- one (1) thermal reticulation unit (ID No. TRU-01), processing a maximum of 10 cycles of polyurethane foam buns per hour, at a maximum volume of 244,296 cubic inches of foam per cycle, exhausting through ten (10) stacks (ID Nos. 35-44);
- (4) two (2) natural gas fired boilers (ID Nos. IPB-01 and IPB-02), each rated at 12.6 million (MM) British thermal units (Btu) per hour, using No. 2 distillate fuel oil as back-up fuel, and each exhausting through one (1) stack (ID Nos. 45 and 46);
- one (1) 4 sheet felt press (ID No. FPA), pressing a maximum of 131,400 sheets per year, exhausting through one (1) stack (ID No. 47); and
- (6) Increase in the foam processing rate of the existing one (1) 6 sheet felt press C (ID No. FPC), from 211,000 sheets per year to processing a maximum of 300,000 sheets per year, exhausting through one (1) stack (ID No. 48);
- (7) The installation of one (1) new 6 sheet felt press D (ID No. FPD), with a **maximum** foam processing rate of 300,000 sheets per year, exhausting through one (1) stack (ID No. 49);
- (8) one (1) 9-platen felt press E (ID: FPE), with a maximum capacity to process foam at a rate of 53 sheets per hour, exhausting through stack ID: 51;
- (9) one (1) flame laminator ID: FL-03, with natural gas-fired burner rated at 0.35 million British Thermal Units per hour (mmBtu/hr). This laminator has a maximum capacity to process foam at a rate of 3,000,000 square feet per month (ft²/mo), exhausting through stack ID: 02-003); and

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Foamex, L.P. Fort Wayne, Indiana Permit Reviewer: TE/EVP

- (8) one (1) Thermal Reticulation Unit, identified as TRU-02, with a maximum throughput of 150,000,000 board feet of polyurethane foam per year, and exhausting through seven (7) stacks (52-58);
- (9) one (1) six-platen felt press E (ID FPE), with a maximum capacity to process foam at a rate of 35 sheets per hour, exhausting through one (1) stack (ID No. 51).
- 3. A new section D.8 was added to include the requirements for the new 6-platen felt press E. Note that the section D.7 that was added under Significant Source Modification No. 003-12873-00225, issued July 3, 2001 should have been numbered as section D.8 since a section D.7 was previously added in Minor Source Modification No. 003-13852-00225, issued on March 15, 2001. However, since unit TRU-02 is now being removed from the Part 70 permit, the D section for that unit will now be removed from the Part 70 permit. Therefore, this new section is numbered D.8. The Table of Contents in the Part 70 permit has been revised to reflect this.

SECTION D.8

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]:

(9) one (1) six-platen felt press E (ID FPE), with a maximum capacity to process foam at a rate of 35 sheets per hour, exhausting through one (1) stack (ID No. 51).

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.8.1 Volatile Organic Compounds (VOCs) and Particulate Matter Less than 10 Microns (PM-10)
[326 IAC 2-1.1-3]

Any change or modification that would lead to an increase in allowable emissions greater than exempt levels, as specified in 326 IAC 2-1.1-3, based on a stack test emission factors of 0.0024 lbs VOC per sheet of foam processed at maximum capacity and 0.0007pound of PM10 per sheet of foam processed at maximum capacity, shall obtain approval from the Office of Air Quality (OAQ) before such change can occur.

D.8.2 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the six-platen felt press E (ID FPE) shall not exceed 3.26 pounds per hour when operating at a process weight rate of 1420 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

Interpolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

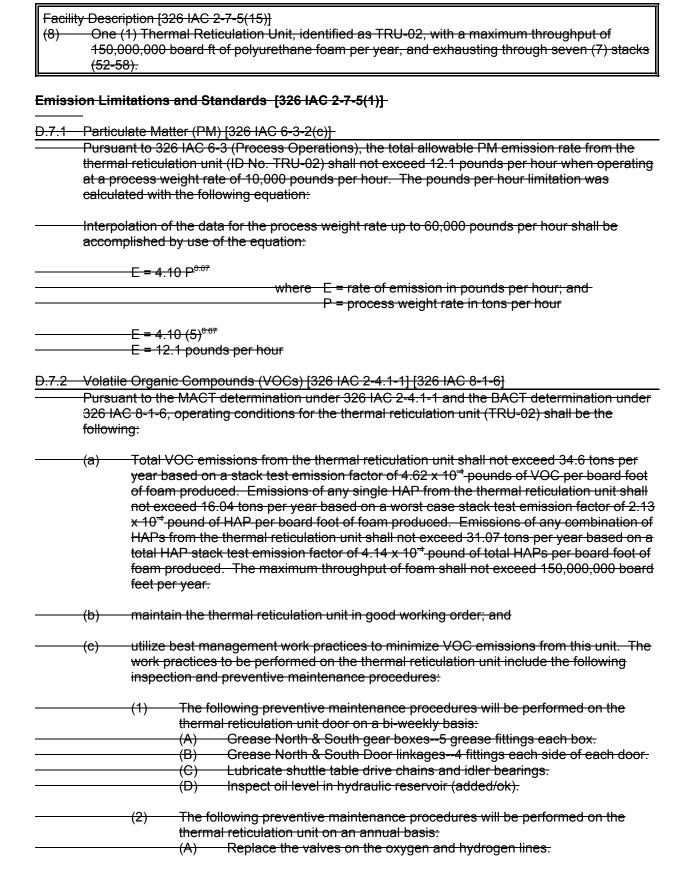
 $E = 4.10 P^{0.67}$ where E =rate of emission in pounds per hour; and P =process weight rate in tons per hour

4. The section for unit TRU-02, which was incorrectly numbered D.7, is removed from the Part 70 permit since this unit will not be constructed at this source. The Part 70 Quarterly Report Form for this unit is also removed.

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SECTION D.7

FACILITY OPERATION CONDITIONS



The following preventive maintenance procedures will be performed on the

thermal reticulation unit shot pin on a semi-annual basis:

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(9)

	(A) Check shot pin hydraulic cylinder mount for broken or loose bolts.
	(B) Check shot pin hydraulic cylinder assembly plates for torque to chamber.
	(C) Check shot pin limit switch mounting bolts for tightness.
	(D) Inspect E.C.S. high temperature probes (3) for proper condition.
	(E) Inspect exygen and hydrogen gauges for zero calibration.
	(F) Inspect Erdco 34 and check for any alarm condition.
	(i) inspect Erace of and sheek for any diamin condition.
(10)	The following preventive maintenance procedures will be performed on the
	thermal reticulation unit on a quarterly basis:
	(A) For water line heat exchanger, open and clean-out all tubes.
(11)	The following preventive maintenance procedures will be performed on the
	thermal reticulation unit oil purifier on a weekly basis:
	(A) When oil pressure goes above 40 psi, service as follows:
	(i) Remove power.
	(ii) Valve off hoses.
	(iii) Drain oil from unit (dispose of properly).
	(iv) Disassemble and remove filter.
	(v) Clean-out then install new filter .
	(vi) Reconnect hoses and open valves.
	(vii) Bleed-off air.
	(viii) Plug in unit and check for proper pressure (25psi).
-	(ix) Check oil level in stokes. Fill as needed.
(12)	The following preventive maintenance procedures will be performed on the
	thermal reticulation unit roof valves on a semi-annual basis:
	(A) Replace oxygen and hydrogen roof valves.
	(B) Rebuild valves - date and stock.
(13)	The following preventive maintenance procedures will be performed on the
(13)	thermal reticulation unit blower on a quarterly basis:
	(A) Change filter on the active unit.
	() Change men on and active and
(14)	The following preventive maintenance procedures will be performed on the
	thermal reticulation unit manometer tube on a monthly basis:
	(A) Disassemble White manometer tube valve. Clean or rebuild as needed.
	(B) Check other valve between Whitey valve and the chamber for condition.
(15)	
	thermal reticulation unit plug purge valve on a weekly basis:
	(A) Replace the plug purge valve.
	(B) Rebuild, tag and stock valve.
(17)	The following preventive maintenance procedures will be performed on the
()	thermal reticulation unit charge valve O-ring on a monthly basis:
	(A) Replace the o-ring on the charge valve face inside the chamber.
	()
(18)	The following preventive maintenance procedures will be performed on the
,	thermal reticulation unit charge valve on a monthly basis:
	(A) Replace the o-ring on the stem of the charge valve.
(19)	The following preventive maintenance procedures will be performed on the
	thermal reticulation unit control line filter on a weekly basis:
	(A) Clean the vacuum control line filters.

During the period between 24 and 36 months after issuance of this permit, the Permittee shall perform stack testing, to verify the emission factors used to determine the potential emissions from this unit, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. In addition to these requirements, IDEM may require compliance testing when necessary to determine if the facility is in compliance.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

(a) The Permittee shall maintain records in accordance with (1) through (3) below for the thermal reticulation unit (ID No. TRU-02). Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.7.2. (1) The board feet of foam produced per month; (2) A log of the dates of use; and (3) The weight of VOCs and HAPs emitted for each compliance period. (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

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INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Nam	e Name: Foamex, L.P.						
Source Addr	ource Address: 3005 Commercial Road, Fort Wayne, Indiana 46809						
Mailing Addr	Mailing Address: 3005 Commercial Road, Fort Wayne, Indiana 46809						
Part 70 Permit No.: T003-7680-00225							
Facility: one (1) natural gas flame laminator machine (ID No. FL-02)							
Parameter: VOC emissions							
Limit:		the total emissions of VOC	shall be limited to no more than a fixed r	nonthly limit			
		of 0.4 tons per month, which	n is equivalent to a laminated foam prod	uction rate of			
		5,000,000 square feet per m	nonth.				
		YEAR:					
		N.A m.A.I	Laminated Foam Production This				
		Month	Month				
			(sq. feet)				
				•			
	9	No deviation occurred in this	s quarter.				
9							
		Deviation/s occurred in this					
		Deviation has been reported	d on:				
	Cuba	sitted by:					
		Submitted by: Fitle / Position:					
		ature:					
	Date:						
	Phon	·					
	1 11011	<u> </u>					

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5. The section D.7 that was added under Minor Source Modification No. 003-13852-00225, issued on March 15, 2001, is revised to delete the 9-platen felt press and its applicable requirements since the unit will not be constructed at this source as follows:

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

- (8) One (1) 9-platen felt press E (ID: FPE), with a maximum capacity to process foam at a rate of 53 sheets per hour, exhausting through stack ID: 51; and
- (9)(8) One (1) flame laminator ID: FL-03, with natural gas-fired burner rated at 0.35 million British Thermal Units per hour (mmBtu/hr). This laminator has a maximum capacity to process foam at a rate of 3,000,000 square feet per month (ft²/mo), exhausting through stack ID: 02-003).

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Volatile Organic Compounds (VOCs)

Any change or modification which may increase the potential to emit VOC, PM and PM10 greater than minor source threshold, as specified in 326 IAC 2-1, based on the stack test required in the Part 70 permit to verify the emission factors shall be subject to New Source Review and must be approved by the Office of Air Quality (OAQ) before such change can occur.

D.7.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

Pursuant to 326 IAC 6-3 (Process Operations), the PM emissions from the following felt presses unit shall be limited as follows:

Facility	Process Weight Rate (ton/hr)	PM Emissions Limit (lb/hr)
9-Platen felt press E (ID: FPE)	1.065	4.28
Flame laminator ID: FL-03	2.0	6.5

The pounds per hour limitation was calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate up to 60,000 pounds per hour shall be accomplished by use of the equation:

 $E = 4.10 P^{0.67}$ where : E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

Compliance Determination Requirement

D.7.3 Testing Requirements [326 IAC 2-7-6(1),(6)]

The Permittee is not required by this permit to perform compliance tests. However, the Commissioner reserves the right to invoke its authority under 326 IAC 2-1.1-11 to require stack testing, monitoring or reporting at any time to assure compliance with all applicable requirements. If testing is required by IDEM compliance with Condition D.7.1 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

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Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.4 Record Keeping Requirements

- (a) The Permitted shall maintain records in accordance with (1) through (4) below for the above facilities. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with Condition D.7.1.
 - (1) The number of polyurethane sheets processed;
 - (2) The weight of the polyurethane foam processed;
 - (3)(2) The total production of laminated foam per month in square feet for the flame laminator;
 - (4)(3) A log of the dates of use; and
 - (5)(4) The weight of VOC emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

Conclusion

The operation of this stationary polyurethane foam production and foam processing plant shall be subject to the conditions of the attached proposed Minor Permit Modification No. 003-16194-00225.